

State of the River Report 2003

AMERICAN HERITAGE RIVERS



UPPER SUSQUEHANNA-LACKAWANNA (PENNSYLVANIA)

Situated in Northeastern Pennsylvania, the Upper Susquehanna-Lackawanna Watershed spans nearly 1,800 square miles of land and includes 1,600 miles of perennial rivers and streams. The watershed is the home of more than 640,000 residents. Lackawanna and Luzerne counties constitute the core of the watershed, which includes portions of several other counties and more than 100 municipalities. It combines the urban centers of Wilkes-Barre, Scranton, and Hazleton with rural, mountainous terrain. Other population centers within the watershed include Bloomsburg, Carbondale, Dickson City, Dunmore, Hazleton, Kingston, Nanticoke, and Pittston.

The Upper Susquehanna and Lackawanna Rivers are the threads that tie our region—and diverse communities—together. The watershed is blessed with beautiful mountains and steep-sided stream valleys that combine to form a panoramic view. We have a rich tradition, industrious population, and wonderful wildlife. In 1804, a poetic writer described the Wyoming Valley as “an island of beauty in a sea of billowy mountains.” The Lackawanna and Wyoming valleys are surrounded by verdant hills that rise to elevations that exceed fifteen hundred feet above the valley floors. The corridor ranges in elevation from 450 feet above sea level at Sunbury to approximately 2,225 feet above sea level at the summit of the region’s highest peak, Bald Mountain. The numerous Native Americans that called this watershed home enjoyed the abundant fish and game found in the region. Many of them also cultivated corn and squash along the rivers’ shores.

Unfortunately, our watershed is also marked by acres of mine-scarred land, piles of coal waste, acid mine drainage, and polluted waterways that are the regrettable legacy of unregulated anthracite mining that occurred decades ago. The discovery of anthracite coal—sometimes referred to as “black gold”—in the region in the 1790s set the stage for an economic revolution. Facilitated by the development of new technologies for burning anthracite and for transporting it in bulk, deep coal mining quickly became the region’s dominant industry. First by river, next by canal in 1831, and finally by railroad in 1851, the Lackawanna and Upper Susquehanna basin produced and shipped millions of tons of coal annually to the nation’s homes and factories. The region experienced tremendous industrial growth and a population explosion, as immigrants came in large numbers from Poland, Germany, Italy, Ireland, Lithuania, Russia, and the Slavic countries.

Mining has had a profound effect on the watershed’s landscape. It created huge strip-mined craters, black mountains of waste, and creeks choked with black silt and deposits of yellow-orange iron oxides. In 1959, a mine collapsed under the Susquehanna. The Knox Mine Disaster killed 12 miners and resulted in the loss of thousands of jobs as an entire network of underground mines flooded. It took more than 30 railroad cars and 400 mine cars to close the hole in the river’s floor and stanch the flow of water. More importantly, it marked the end of deep coal mining in Luzerne County and the beginning of an uncontrolled flow of acid mine drainage (AMD) into the Susquehanna and Lackawanna’s Rivers.



Floods in 1936, 1972, and 1996 dealt the region additional blows. In 1972, Tropical Storm Agnes left \$3.9 billion in present dollars damages as it ruined more than 25,000 homes, damaged nearly 3,000 businesses, and destroyed 5 major bridges. Then-President Richard Nixon called the event the “greatest natural disaster in U.S. history.” While many residents decided to rebuild their lives in the valleys, thousands fled to higher ground or left. Those who remained continued to fear the rivers’ destructive capacities, and failed to recognize their resource potential. After many years of planning by the U.S. Army Corps of Engineers and its local sponsor, construction began in the late 1990s on a \$200 million levee-raising project to protect the Wyoming Valley from future flooding.

The American Heritage River designation has played an important role in the rebirth of this region: it has encouraged the communities’ treatment of the waterways as assets, and not as polluted and flood-prone liabilities; fostered local cooperation and new, innovative public-private partnerships; and embarked on numerous economic development, environmental protection, and historic and cultural preservation initiatives. In short, the Upper Susquehanna-Lackawanna Watershed is reviving itself and fulfilling the vision of its earliest settlers, who called it “one of the richest and most beautiful landscapes upon which the eye of man ever rested.”

PRIORITY PROJECTS AND ACCOMPLISHMENTS

Environmental Master Plan for the Watershed. The cornerstone of our work plan for a brighter watershed continues to be the development of a comprehensive GIS (Geographic Information Systems) Watershed Plan for the Upper Susquehanna-Lackawanna American Heritage River, using the most sophisticated technology available today. Funded with federal and state grants exceeding \$2 million, thanks to the strong support of Congressman Paul Kanjorski, this GIS Master Plan contains extensive data about the region’s environment, population, economics, physical infrastructure, natural resources, and other attributes—and portrays a spatial relationship for environmental features (*e.g.*, forests, streams, wetlands, wildlife habitat, etc.) and the local infrastructure (*e.g.*, roads, cities, utilities, building foundations, sewer systems, etc.).

During the last twelve months, numerous municipalities and not-for-profit organizations are taking advantage of our GIS data—and, by doing so, saving local taxpayers hundreds of thousands of dollars—for regional planning, economic development and environmental remediation projects involving vegetation cover, wetlands,



streams, roads, parks, housing developments, and water treatment facilities. The GIS is also pinpointing the sources of water pollution, where the impacts are located, how the topography of the land affects that water flow, and the costs of cleaning the site. Our GIS work as part of AHR has received wide acclaim, including from the National Partnership for Reinventing Government, for turning a deluge of digital data into useful maps to help local communities control flooding, clean pollution, and plan growth. Our work has also attracted a national company to open a new facility in the Watershed and to assist local colleges with job training in this growing field. We have hosted international scientists, including a group of Russian experts, who we

hosted (along with USDA's Rural GIS program and USFWS) for a GIS Environmental Training Session. Lastly, we are devoting resources to educating local secondary and college students, including a recent canoe ride down the Susquehanna River, which ended with environmental education activities on the riverfront.

CityVest—Restoration of Blighted Residential and Commercial Sites. Founded as part of the AHR Initiative, CityVest is a not-for-profit community development corporation dedicated to housing and commercial development projects to advance the economic revitalization of Northeastern Pennsylvania's Wyoming Valley, particularly the downtown urban centers of Wilkes-Barre, Nanticoke, and Pittston—all along the Susquehanna River. CityVest acts as a developer of last resort, involved in the acquisition, rehabilitation, and sale or rental of blighted, dilapidated and underutilized residential and commercial properties. Its Board of Directors reflects a partnership of the local business, civic, and higher education communities. In the past year, CityVest has: (1) purchased, raised capital, and renovated and re-sold historic homes on Wilkes-Barre's majestic South Franklin Street, on the edge of the Wilkes University campus and adjacent to the Susquehanna River; (2) supported the City of Pittston and West Pittston urban beautification and riverfront project to install fiber-optic light on the Water Street Bridge, thereby attracted local residents and visitors to the riverfront; (3) purchased, raised capital, and commenced work to redevelop the historic Sterling Hotel. To date, CityVest has raised more than \$6 million in public and private support for its projects, including from the U.S. Department of Housing and Urban Development.



Water Quality Monitoring and Remediation of CSOs.

The Upper Susquehanna-Lackawanna American Heritage River has received a \$400,000 grant from the U.S. Environmental Protection Agency—as part of Project Impact—to establish the first real-time water quality monitoring in the watershed to facilitate environmental assessment and cleanup strategies. The project—RiverNet, short for Real-Time Internet Visualization and Environmental Reporting Network—allows us to track the impact of acid mine drainage and combined sewer overflows in our region in real time, with leading technology for water quality monitoring and global positioning systems for measuring and improving water quality, and evaluating streamside vegetation. This constant flow of information, displayed on the Internet, enables us to target specific areas of the river for remediation work, specifically with regard to sewage outflows. In addition, \$1 million in federal funding (EPA) has been secured to begin the remediation of combined storm and sewer overflows.

Enhancing Public Access to and Enjoyment of the Riverfront. Also high on the AHR agenda this past year has been participation in committees, working alongside the US



Army Corps of Engineers and others, to open pedestrian access to the Susquehanna River and to build the Riverfront Commons—all as part of the \$200 million Wyoming Valley Levee Raising flood control project. The US Army Corps of Engineers has approved the construction of three portals in the floodwall to afford easy pedestrian access to the river for recreation. The proposed riverfront park, designed by the renowned firm of Sasaki and Associates, contemplates trails, an amphitheatre, boat dock, gardens, and other amenities. In the northern section of the Watershed, along the Lackawanna River, the Heritage Valley Riverfront Greenway project is underway this year, which will create a walkway and greenway along the Lackawanna River in downtown Scranton.



FUTURE CHALLENGES

The Upper Susquehanna-Lackawanna Watershed AHRI is proud of its accomplishments since receiving American Heritage River designation, but there is still much to be done to enhance the environmental and economic quality of life in the region. To build on the success to date, the river community is evaluating ways to finance its needs, including:

- The proposed Abandoned Mine Land Area Redevelopment Act, an innovative tax credit bond proposal for land and water reclamation.
- Financing to remedy combined storm and sewer overflows.
- Enhanced investment in public-private community grant programs—administered on a local level by groups such as CityVest—that promote economic development, historic and cultural preservation, and environmental protection and restoration, including grants for project construction.
- Collaborative support for the Susquehanna Riverfront initiatives, including the riverfront park, the Susquehanna River Landing, and other recreational amenities.

WEBSITES

www.paheritageriver.org

www.epa.gov/rivers/98rivers/susquehanna.html

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